WHAT IS CLAIMED IS:

1. A use of an isolated peptide of 40 or fewer amino acids, comprising a sequence with at least 90% identity to a sequence $TFSX_1LIX_2IFQ$ (SEQ ID NO:4), where X_1 and X_2 are independently selected from amino acids with a charge under physiological conditions, and wherein said peptide, when presented as an antigen, raises antibodies which bind to and cause destruction of pathologically adherent erythrocytes, for the manufacture of a medicament to cause destruction of erythrocytes that adhere to vascular endothelial cells due to a pathological condition.

2. A use of claim 1, wherein X_1 and X_2 are both negatively charged.

3. A use of claim 1, wherein X_1 and X_2 are both positively charged.

4. A use of claim 1, wherein X_1 and X_2 are both lysine.

5. A use of claim 1, wherein one or more of said amino acids is a D-amino acid.

6. A use of claim 1, wherein said peptide has the sequence TFSKLIKIFQ (SEQ ID NO:3).

7. A use of claim 1, wherein said pathological condition is selected from the group consisting of diabetes, thalassemia, sickle cell anemia, and malaria.

8. A use of claim 1, wherein said medicament comprises antibodies.

9. A use of claim 8, wherein said antibodies are polyclonal.

10. A use of claim 8, wherein said antibodies are monoclonal.

11. A use of claim 10, wherein said monoclonal antibodies are humanized.

12. A use of a nucleic acid encoding an isolated peptide of 40 or fewer amino acids, comprising a sequence at least 90% identical to a sequence $TFSX_1LIX_2IFQ$ (SEQ ID NO:4), where X_1 and X_2 are independently selected from amino acids with a charge under physiological conditions, and wherein antibodies raised by said peptide bind to and cause destruction of pathologically adherent erythrocytes, for the manufacture of a

medicament to cause destruction of erythrocytes that adhere to vascular endothelial cells due to a pathological condition.

13. A use of claim 12, wherein X_1 and X_2 are both negatively charged.

14. A use of claim 12, wherein X_1 and X_2 are both positively charged.

15. A use of claim 12, wherein X_1 and X_2 are both lysine.

16. A use of claim 12, wherein said pathological condition is selected from the group consisting of diabetes, thalassemia, sickle cell anemia, and malaria.

17. A method for lysing erythrocytes adherent due to a pathological condition, said method comprising administering to a patient with said adherent erythrocytes antibodies that specifically bind to a protein having an amino acid sequence YETFSKLIKIFQDH (SEQ ID NO:5) on said erythrocytes, wherein binding of said antibodies to said amino acid sequence results in destruction of said adherent erythrocytes.

18. A method of claim 17, wherein said pathological condition is selected from the group consisting of diabetes, thalassemia, sickle cell anemia, and malaria.

19. A method for lysing erythrocytes adherent due to a pathological condition, said method comprising administering to a patient with said pathologically adherent erythrocytes an isolated peptide with at least 80% sequence identity to a sequence $YX_1TFSX_2LIX_3IFQX_4X_5$ (SEQ ID NO:6), or a fragment thereof, which peptide or fragment thereof, when presented as an antigen, raises antibodies which specifically bind to and cause destruction of said pathologically adherent erythrocytes, wherein X_1, X_2, X_3, X_4 and X_5 are independently selected from amino acids that bear a charge at physiological pH,.

20. A method of claim 19, wherein X_1 and X_4 bear the same charge and X_2 and X_3 bear the same charge, but the charge borne by X_1 and X_4 is not the same as the charge borne by X_2 and X_3.

21. A method of claim 20, wherein the charge borne by X_2 and X_3 is positive.

22. A method of claim 19, wherein X_2 and X_3 are lysine residues.

23. A method of claim 19, wherein said peptide has 100% sequence identity to SEQ ID:6 and further wherein X_2 and X_3 are lysine residues, X_1 is a glutamic acid, X_4 is an aspartic acid and X_5 is a histidine (SEQ ID NO:5).

24. A method of claim 19, wherein one or more of said amino acids is a D-amino acid.

25. A method for lysing erythrocytes adherent due to a pathological condition, said method comprising administering to a patient with said pathologically adherent erythrocytes a nucleic acid encoding a peptide with at least 80% sequence identity to the sequence $YX_1TFSX_2LIX_3IFQX_4X_5$ (SEQ ID NO:6), or fragment thereof which raises antibodies which specifically recognize said peptide, wherein X_1, X_2, X_3, X_4, and X_5 are independently selected from amino acids that bear a charge at physiological pH, wherein expression of said peptide raises antibodies which specifically bind to and cause destruction of said pathologically adherent erythrocytes.

26. A method of claim 25, wherein X_1 and X_4 bear the same charge and X_2 and X_3 bear the same charge, but the charge borne by X_1 and X_4 is not the same as the charge borne by X_2 and X_3.

27. A method of claim 25, wherein the charge borne by X_2 and X_3 is positive.

28. A method of claim 25, wherein X_2 and X_3 are lysine residues.

29. A method of claim 25, wherein said peptide has 100% sequence identity to SEQ ID:6 and further wherein X_2 and X_3 are lysine residues, X_1 is a glutamic acid, X_4 is an aspartic acid and X_5 is a histidine (SEQ ID NO:5).

30. A composition of an isolated peptide of the formula with at least 80% sequence identity to a sequence $YX_1TFSX_2LIX_3IFQX_4X_5$ (SEQ ID NO:6), wherein X_1, X_2, X_3, X_4 and X_5 are independently selected from amino acids that bear a charge at physiological pH, and wherein antibodies raised by said peptide bind to and cause destruction of pathologically adherent erythrocytes, and a pharmaceutically acceptable carrier.

31. A composition of claim 30, wherein X_1 and X_4 bear the same charge and X_2 and X_3 bear the same charge, but the charge borne by X_1 and X_4 is not the same as the charge borne by X_2 and X_3.

32. A composition of claim 30, wherein the charge borne by X_2 and X_3 is positive.

33. A composition of claim 30, wherein X_2 and X_3 are lysine residues.

34. A composition of claim 30, wherein said peptide has 100% sequence identity to SEQ ID NO:6 and further wherein X_2 and X_3 are lysine residues, X_1 is a glutamic acid, X_4 is an aspartic acid, and X_5 is a histidine (SEQ ID NO:5).

35. A composition of claim 30, wherein one or more of said amino acids is a D- amino acid.

36. An isolated peptide with at least 80% sequence identity to the sequence $YX_1TFSX_2LIX_3IFQX_4X_5$ (SEQ ID NO:6) or fragment thereof, which peptide or fragment, when presented as an antigen, raises antibodies that specifically bind to SEQ ID NO:5 and cause destruction of pathologically adherent erythrocytes and wherein X_1, X_2, X_3, X_4 and X_5 are independently selected from amino acids that bear a charge at physiological pH.

37. An isolated peptide of claim 36, wherein X_1 and X_4 bear the same charge and X_2 and X_3 bear the same charge, but the charge borne by X_1 and X_4 is not the same as the charge borne by X_2 and X_3.

38. An isolated peptide of claim 36, wherein the charge borne by X_2 and X_3 is positive.

39. An isolated peptide of claim 36, wherein X_2 and X_3 are lysine residues.

40. An isolated peptide of claim 36, which peptide has 100% sequence identity to SEQ ID NO:6 and further wherein X_2 and X_3 are lysine residues, X_1 is a glutamic acid, X_4 is an aspartic acid and X_5 is a histidine (SEQ ID NO:5).

41. An isolated peptide of claim 36, wherein one or more of said amino acids is a D- amino acid.

42. An isolated nucleic acid encoding a peptide with at least 80% sequence identity to $YX_1TFSX_2LIX_3IFQX_4X_5$ (SEQ ID NO:6) or a fragment thereof, which peptide or fragment, when presented as an antigen, raises antibodies that specifically bind to SEQ ID NO:5 and cause destruction of pathologically adherent erythrocytes and further wherein X_1, X_2, X_3, X_4, and X_5 are independently selected from amino acids that bear a charge at physiological pH.

43. An isolated nucleic acid of claim 42, wherein X_1 and X_4 bear the same charge and X_2 and X_3 bear the same charge, but the charge borne by X_1 and X_4 is not the same as the charge borne by X_2 and X_3.

44. An isolated nucleic acid of claim 42, wherein the charge borne by X_2 and X_3 is positive.

45. An isolated nucleic acid of claim 42, wherein X_2 and X_3 are lysine residues.

46. An isolated nucleic acid of claim 42, wherein said encoded peptide has 100% sequence identity to SEQ ID NO:6 and further wherein X_2 and X_3 are lysine residues, X_1 is a glutamic acid, X_4 is an aspartic acid, and X_5 is a histidine (SEQ ID NO:5).

47. An isolated nucleic acid of claim 42 operably linked to a promoter.

48. An isolated nucleic acid of claim 46 operably linked to a promoter.

49. A composition of an isolated nucleic acid encoding a peptide with at least 80% sequence identity to the sequence $YX_1TFSX_2LIX_3IFQX_4X_5$ (SEQ ID NO:6) or fragment thereof, which peptide or fragment, when presented as an antigen, raises antibodies that specifically bind to SEQ ID NO:5 and cause destruction of pathologically adherent erythrocytes, wherein X_1, X_2, X_3, X_4, and X_5 are independently selected from amino acids that bear a charge at physiological pH, and a pharmaceutically acceptable carrier.

50. A composition of claim 49, wherein X_2 and X_3 are lysine residues, X_1 is a glutamic acid, X_4 is an aspartic acid, and X_5 is a histidine (SEQ ID NO:5).